

REMARKS

Claims 1-37 are pending in this application.

Claim 8, 12 and 28 are objected to.

Claims 1-7, 9-11, 13-27 and 29-37 are rejected

The office action dated February 3, 2006 indicates that base claims 1, 19-21, 34, and 37 are rejected under 35 USC §102(b) as being anticipated by Skeirik U.S. Patent No. 5,826,249. These rejections are respectfully traversed.

Base claim 1 recites a method of training a neural network with input data. The neural network includes a plurality of connection weights. The method comprises using the neural network to rescale the input data; determining errors for the rescaled data; and using neighborhoods of the errors to adjust the connection weights.

Skeirik describes a neural network for the monitoring and control of manufacturing processes (col. 1, lines 26-29). A representative embodiment of training such a neural network is disclosed at col. 20, lines 46+. During training of the neural network, training input data is retrieved and scaled (col. 23, lines 23-26), and then fed to the neural network, which predicts output data (col. 23, lines 27-28). The output data is then de-scaled (col. 23, lines 33-35). Error data is computed from the de-scaled output data and the unscaled input data (col. 23, lines 35-44). The neural network is retrained using the error data (col. 23, lines 45-49).

Thus, Skeirik's does not teach or suggest computing errors for rescaled input data. Therefore, claim 1 and its dependent claims 2-18 should be allowed over Skeirik.

Skeirik does not describe how the neural network is retrained, other than saying any method can be used (col. 23, lines 48-49). Earlier in the patent, Skeirik describes back propagation (col. 12, lines 4+). However, the description of back propagation does not teach or suggest using neighborhoods of errors to adjust connection weights. For this additional reason, claim 1 and its dependent claims 2-18 should be allowed over Skeirik.

Base claims 19-21, 34 and 37 and their dependent claims should be allowed for the same reasons.

Base claim 34 and its dependent claims 35-36 should be allowed for the additional reason that Skeirik does not teach or suggest any particulars of rescaling a color image. With respect to claims 34-36, Skeirik is not even analogous art. MPEP 2141.01(a) states “In order to rely on a reference as a basis for rejection of an applicant’s invention, the reference must either be in the field of applicant’s endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned.” Skeirik’s field involves the monitoring and control of manufacturing processes (col. 1, lines 26-29), whereas the field of claim 34 involves rescaling a color image. Skeirik is faced with the problems of determining set points for manufacturing processes, and maintaining process conditions at those set points during manufacture (col. 2, lines 42+ in general; and col. 3, lines 38-52 and col. 6, lines 7-17 in particular). Image resizing is not concerned with such problems.

The examiner is respectfully requested to withdraw the rejections of the claims. The examiner is encouraged to contact applicant’s attorney Hugh Gortler to discuss any issues that might remain.